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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 09/900,522  
Filing Date: 7/6/01  
Applicant: Bond et al  
Group Art Unit: 2857  
Examiner: not assigned  
Title: Aircraft Synthesis and systems evaluation method for  
determining and evaluating electrical power generation  
and distribution system components  
Attorney Docket: 7784-000260

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Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**PRELIMINARY AMENDMENT**

Sir:

Prior to examining the above-referenced application, it is requested that the application be amended as indicated below.

**IN THE SPECIFICATION**

Please replace the following paragraphs of the specification. Applicant includes herewith an Attachment for Specification Amendments showing a marked up version of each replacement paragraph.

**[0091]** Figure 73 illustrates the FC 32 Report screen;

**[00134]** Figure 72 illustrates the "Report" menu tab having been selected, which produces three report types available to the designer from a first pull down menu. The first report is an "FC 32" report shown in Figure 73. This report contains all the components of the EPGDS sorted by component number and provides a component designation, quantity, unit and subtotal weight, and body station center of gravity. Figure 74 shows the screen 95 associated with the "All Variables" menu option in Figure 72. Figure 75 illustrates the third menu option, "Charts" having been selected, which produces a second pull down menu with six screens available to the designer. The "Dependability Cost Summary" screen 100 (Figure 76) illustrates graphs relating to various dependability factors calculated by the system 10. Figure 77 illustrates the "FC 32 Total EPGDS Weight" screen 102. This screen 102 represents a graph of the total EPGDS weight for a given type of aircraft capable of accommodating a given number of passengers. Figure 78 illustrates the "FC 32-01 AC Power System Weight" screen 104 which shows where the ASSET weight of the EPGDS falls on a two dimensional graph with relation to existing aircraft as a function of total kVA. Figure 79 represents the "FC 32-08 Power Panels + ELMS" screen 106. Screen 106 shows where the ASSET weight of the FC 32-08 Power Panels + ELMS falls on a two dimensional graph with relation to existing aircraft as a function of MTOW. Figure 80 illustrates the "FC 32-01-90 AC Electrical System Wiring" screen 108. Screen 108 shows where the ASSET weight of the FC 32-01-90 AC Electrical System Wiring falls on a two dimensional graph with relation to existing aircraft as a function of maximum flight phase loads times fuselage length. Figure 81 illustrates the "Below Wing Weight" screen 110 which is a graph 108 shows where the ASSET weight of the below wing

weight falls on a two dimensional graph with relation to existing aircraft as a function of MTOW.

### REMARKS

This amendment is in response to the "Notice of Omitted Items In Non-Provisional Application", mailed February 20, 2002.


The Office had noted that while the specification called for Figures 73a and 73b, these figures were not present in the copy of the application received by the Office. Upon review of this matter, it is believed that existing Figure 73 is the only Figure that should have been referenced in the specification relative to the "FC 32" screen. In view of this, minor amendments have been made to the specification to reflect this amendment. Particularly, minor amendments have been made in the section entitled "Brief Description of the Drawings" (paragraph 91) and in the "Detailed Description of the Preferred Embodiment" on page 29, paragraph 134, to reflect this change.

A copy of the above-mentioned Notice sent by the Office is also being submitted with this amendment.

If there are any questions regarding this matter, it is requested that the undersigned be contacted at the earliest opportunity to discuss same.

Respectfully submitted,

Dated: April 18, 2002

By:   
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## ATTACHMENT FOR SPECIFICATION AMENDMENTS

The following is a marked up version of each replacement paragraph and/or section of the specification in which underlines indicates insertions and brackets indicate deletions.

[0091] Figure [73A and 73B] 73 illustrates the FC 32 Report screen;

[00134] Figure 72 illustrates the "Report" menu tab having been selected, which produces three report types available to the designer from a first pull down menu. The first report is an "FC 32" report shown in [Figures 73A and 73B] Figure 73. This report contains all the components of the EPGDS sorted by component number and provides a component designation, quantity, unit and subtotal weight, and body station center of gravity. Figure 74 shows the screen 95 associated with the "All Variables" menu option in Figure 72. Figure 75 illustrates the third menu option, "Charts" having been selected, which produces a second pull down menu with six screens available to the designer. The "Dependability Cost Summary" screen 100 (Figure 76) illustrates graphs relating to various dependability factors calculated by the system 10. Figure 77 illustrates the "FC 32 Total EPGDS Weight" screen 102. This screen 102 represents a graph of the total EPGDS weight for a given type of aircraft capable of accommodating a given number of passengers. Figure 78 illustrates the "FC 32-01 AC Power System Weight" screen 104 which shows where the ASSET weight of the EPGDS falls on a two dimensional graph with relation to existing aircraft as a function of total kVA. Figure 79 represents the "FC 32-08 Power Panels + ELMS" screen 106. Screen 106 shows where the ASSET weight of the FC 32-08 Power Panels + ELMS falls on a two dimensional graph with relation to existing aircraft as a

